# datanotes

Keeping Informed about Achieving the Dream Data



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## **Achieving the Dream**

Achieving the Dream is a multiyear national initiative to help more community college students succeed. The initiative is particularly concerned about student groups that traditionally have faced significant barriers to success, including students of color and lowincome students. The initiative aims to help participating colleges identify at-risk student groups in their student populations and then design and implement intervention strategies that will increase the success of these at-risk groups.

# **Changes in Cohort Composition**

Research by the U.S. Department of Education indicates that community college enrollments increased from approximately 5 million to more than 6 million between 1990 and 2004. The racial/ethnic composition and income level of students also changed over these 14 years. The share of white community college students dropped from 76 percent in 1990 to 63 percent in 2004, while the proportion of black and Hispanic students increased from 18 percent in 1990 to 28 percent in 2004.1 In addition, there has been a recent increase in the proportion of low-income students: The percentage of community college students from families living at or below the poverty level increased from 17 percent to 21 percent from 1990 to 2004.2

Participating colleges are encouraged to undertake similar analyses of their own cohorts so they can better understand — and take steps to improve — student outcomes on their campuses.

In terms of student success, credential completion is one measure. U.S. Department of Education data indicate that 26 percent of white students enrolled in community colleges in 2002 graduated within three years of starting, compared with 19 percent of Hispanic, 17 percent of black and 22 percent of Native American students.3 Community colleges currently enroll high percentages of students of color,4 and these students traditionally have faced significant barriers to success. Recent fast growth among these populations may result in the nation's community colleges enrolling higher proportions of these students. These changing demographics are among the variables that colleges should consider when designing program offerings or strategies to improve students' chances to succeed.

Because the composition of a college's student body changes over time — and because college officials must understand these changes if they are to maximize student success — this analysis addresses the changing composition of the Achieving the Dream student cohorts. The analysis compares the characteristics of the 2002 through 2005 student cohorts for 23 of the 27 colleges that began participating in the initiative in its first year, 2004. This analysis examines distribution of students by race/ ethnicity, age, gender, attendance status, developmental education placement and Pell Grant receipt. Participating colleges are encouraged to undertake similar analyses of their own cohorts so they can better understand — and take steps to improve — student outcomes on their campuses.

# Race/Ethnicity and Age

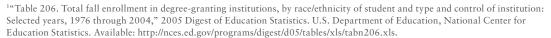
The cohorts vary slightly in racial/ethnic composition over the four years: The percentage of Hispanic students in the cohort grew from 32 to 34 percent, while the percentage of white students decreased from 41 to 38 percent (Figure 1).

Although the U.S. population is aging, the portion of students under the age of 20 increased by five percentage points between 2002 and 2005, from 42 to 47 percent. At the same time, the percentage of students over the age of 30 decreased by four percentage points (20 percent to 16 percent). There was no change in the percentage of students aged 20 to 24.

# **Pell Grant Receipt**

Pell Grant receipt is used as a measure of lowincome status for students at colleges participating in the Achieving the Dream initiative. The

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<sup>2</sup>JBL Associates, Inc. compiled data from the U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Study (NPSAS), 1999–2000 and 2003–04; this increase is statistically significant.

<sup>3</sup>JBL Associates, Inc. compiled data from the U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, 2005–06 Graduation Rate Survey datafile.

<sup>4</sup>Community colleges enroll 47 percent of African American undergraduate students, 55 percent of Hispanic undergraduate students and 57 percent of Native American undergraduate students. American Association of Community Colleges, "Community College Fact Sheet." Available: www.aacc.nche.edu/Content/NavigationMenu/AboutCommunityColleges/Fast\_Facts1/Fast\_Facts.htm.



#### What Is a Cohort?

A *cohort* is a group of people studied over time. The individuals in the group have at least one statistical factor — such as when they started college — in common.

The Achieving the Dream 2002 student cohort, for example, is the group of credentialseeking students that attended Achieving the Dream institutions for the first time in fall 2002.

Tracking a cohort over time makes it possible to compare the progress and outcomes of different groups of students (e.g., groups defined by race, age or other demographic characteristics) and to determine if there are gaps in achievement among groups of interest.

percentage of students who received Pell Grants during their first term of enrollment increased eight percentage points from 2002 to 2005 — 33 percent of the 2002 cohort received Pell Grants compared with 41 percent of the 2005 cohort (Figure 2).5 From 2004 to 2005, there was a sizable (six percentage points) jump in the percentage of students receiving Pell Grants.

It is reasonable to ask whether the change in the percentage of students receiving Pell Grants can be attributed to attendance status, because full-time students are more likely to receive Pell Grants than part-time students. This, however, is not the cause as the percentage of students attending full time increased only two percentage points between 2002 and 2005. The increase in the percentage of students receiving Pell Grants could be due to colleges' efforts to make more students aware of Pell Grants, or colleges may have helped more students with their financial aid applications. Or, this could represent a genuine increase in the percentage of low-income students.

## **Major Field During the First Term**

Some community college students seek specific education or training that can be completed at their community college. This course of study, which can result in a certificate or an associate degree, usually is preparation for a specific occupation. Students who fit this description enroll in terminal-major programs. Other students begin their education with the goal of transferring to a four-year college to finish bachelor's degrees; these are transfer-seeking students. Still others are not sure of their goals or are undeclared.

The percentage of students who enrolled in terminal majors during their first term remained constant over the four cohorts (37 percent, Figure 1). However, the percentage of students who enrolled in transfer-seeking programs during their first term increased from 50 to 54 percent in the four years. This increase was offset by a decline in the percentage of undeclared students, from 13 percent in the 2002 cohort to 9 percent in the 2005 cohort. Caution should be used with these data, however, as they could reflect a real increase in the portion of students who enrolled in transfer-seeking programs, better reporting capacity for colleges or

Figure 1. Percentage distribution of Achieving the Dream students by selected characteristics: Cohorts 2002-05

Total         100%         100%         100%         10           Race/ethnicity         Native American         3%         3%         3%           Asian/Pacific Islander         4%         4%         4%           Black         15%         15%         15%           White         41%         41%         39%         3           Hispanic         32%         33%         34%         3           Other*         5%         4%         4%	005
Race/ethnicity           Native American         3%         3%         3%           Asian/Pacific Islander         4%         4%         4%           Black         15%         15%         15%           White         41%         41%         39%         3           Hispanic         32%         33%         34%         3           Other*         5%         4%         4%	
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Asian/Pacific Islander 4% 4% 4% 4% Black 15% 15% 15% 15% White 41% 41% 39% 30% 34% 30% 34% 34% 35% 34% 4% 4% Age	
Islander         4%         4%         4%           Black         15%         15%         15%           White         41%         41%         39%         3           Hispanic         32%         33%         34%         3           Other*         5%         4%         4%           Age         4%         4%         4%	3%
White         41%         41%         39%         3           Hispanic         32%         33%         34%         3           Other*         5%         4%         4%           Age         4%         4%         4%	4%
Hispanic         32%         33%         34%         3           Other*         5%         4%         4%           Age         4%         4%         4%	16%
Other* 5% 4% 4% Age	38%
Age	34%
	5%
Younger than 20 42% 44% 45%	
	47%
20–24 27% 27% 28% 2	27%
25–29 11% 11% 10%	10%
30–44 15% 14% 13%	12%
45 or older 5% 4% 4%	4%
Type of major	
Terminal major 37% 37% 37%	37%
Transfer seeking 50% 50% 53% 5	54%
Undeclared 13% 13% 10%	9%
Gender	
Female 56% 55% 56% 5	56%
Male 44% 45% 44%	JU /0

<sup>\*</sup>Includes non-resident alien, more than one, other

changes in enrollment criteria that resulted in fewer students enrolling with undeclared intentions.

# **Developmental Education**

The percentage of students referred to developmental education increased over the four cohorts, with the greatest increases in math and English referrals. The percentage of students referred to developmental math increased five percentage points, from 57 percent in the 2002 cohort to 62 percent in the 2005 cohort (Figure 2). The percentage of students referred to developmental English increased six percentage points (26) percent to 32 percent) from the 2002 cohort to the 2005 cohort. The percentage referred

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Not all colleges had the capacity to report Pell Grant receipt status for their students, especially for the early cohorts. Therefore, the Pell Grant receipt analysis reflects only the 21 colleges that could report Pell Grant data for all four cohorts.

to developmental reading increased very slightly, from 32 to 34 percent from the 2002 to the 2005 cohort.6 The increase in developmental education referrals could be due to colleges identifying more needs than they had in the past, new intervention strategies that resulted in more students being referred to developmental education or a genuine increase in developmental needs.

## **Stable Characteristics**

Two characteristics remained relatively stable over the four cohorts: the distribution of students by gender (55 to 56 percent of each cohort was female, Figure 1) and attendance status (50 percent of the 2002 cohort and 48 percent of the 2005 cohort attended part time, Figure 2).

### What Does This Mean?

Although some of these four-year changes are small, they indicate potential general trends toward larger at-risk enrollments in Achieving the Dream colleges. Being a student of color, being a low-income student and having deep developmental needs all have been linked to diminished likelihood of success. At Achieving the Dream colleges, the percentage of Hispanic students increased over the four years, as did the percentage of students who received Pell Grants and the percentage of students referred to developmental education.

What implications do these changes have for the work colleges need to undertake in the areas of academics, student services or financial aid services? ??

These short-term trends raise additional questions for the long term: Will these trends continue over the next five, 10 or 15 years? And if so, how will that affect the work colleges need to undertake in the areas of academics, student services or financial aid services?

As colleges analyze their cohorts, they should bear in mind that their data may be different from the initiative wide data — and that initiativewide data often "smooth" more dramatic changes experienced by individual colleges. Individual colleges may, for example, find changes in gender and attendance status even though the aggregate data show these characteristics to be stable.

Figure 2. Percentage of Achieving the Dream students having selected characteristics: Cohorts 2002-05

	Cohort			
Characteristic	2002	2003	2004	2005
Pell Grant recipients	33%	36%	35%	41%
Students referred to developmental education				
Math	57%	58%	63%	62%
English	26%	28%	31%	32%
Reading	32%	33%	32%	34%
Students attending part time	50%	48%	46%	48%

Colleges should conduct their own analyses of trends in their cohort compositions. Being sensitive to such variations will help colleges interpret results from their strategies, because changes in cohort composition can inform evaluations of intervention strategies over time. If, for example, a college were evaluating an advising strategy for its 2008 cohort, and if that cohort had a higher portion of students needing developmental math than earlier cohorts, some of the strategy's success might be mitigated by this change in the cohort. The college would need to take this fact into account when assessing the value of the intervention strategy. Following are examples of issues and questions Achieving the Dream institutions should consider when comparing outcomes across different cohorts:

- Based on Pell Grant receipt (the proxy for lowincome status) and race/ethnicity, are there meaningful differences in the composition of the different cohorts at your institution? What about other student characteristics?
- What do past studies show about the relationships between student characteristics and student needs and outcomes, such as developmental needs or student persistence?
- How do these relationships and the differences among the various cohorts affect your analyses?

# **Achieving the Dream's Database**

Achieving the Dream colleges can use the Achieving the Dream database created by JBL Associates, Inc. to replicate the analysis presented here for their own institutions. This analysis might help colleges identify areas of their curricula or groups of students needing special attention. ■

Data Notes is a bimonthly publication that examines data to illuminate the challenges facing Achieving the Dream colleges and to chart their progress over time.

This issue of Data Notes was written by Sue Clery and Amy Topper, research associates, JBL Associates, Inc. and edited and designed by KSA-Plus Communications, Inc.

If you have questions regarding this issue, or if there is a topic you would like to see addressed in *Data Notes*, please contact Sue Clery at sclery@jblassoc.com.

This report uses the March 2007 version of the Achieving the Dream database. Colleges are identified by the year they started work with the initiative.

Developmental education referrals data were not provided by all colleges; the developmental education referrals data are based on 19 of the 27 Round 1 colleges.